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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,861	01/15/2002	Wei Luo	CISCP733	1638
26541	7590	10/26/2005	EXAMINER	
Cindy S. Kaplan P.O. BOX 2448 SARATOGA, CA 95070			TANG, KAREN C	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/051,861	Applicant(s) LUO ET AL.	
	Examiner Karen C. Tang	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/15/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, on line 4-6 page 21, it states, "accounting information... is different than the accounting information".

There are two accounting information, but to the Examiner, it is indicating the same accounting information, thus, Examiner will view two accounting information to be the same accounting information for the examining purpose.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fulton et al hereinafter Fulton (US 2002/0010865) in view of Applicant Admitted Prior Art (AAPA).

1. Referring to Claim 1, Fulton teaches a method for providing authentication in a network having an AAA server, the method comprising:

receiving a request from a remote user for connection with a network (refer to 0025) at a virtual home gateway (PVC, refer to 0037, 0102);

associating the remote user with the network (refer to 0038, table 1, page 2).

Art Unit: 2151

sending a request to authenticate the remote user from the virtual home gateway to the AAA server (refer to 0101).

connecting the remote user to the network if the AAA server authenticate the user (refer to 0101).

A computer readable storage medium for storing the codes (computing device, which is inherently comprises memories that store codes, refer to 0025).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.

2. Referring to Claim 2, Fulton teaches wherein associating the remote user comprises receiving a network ID and address of an AAA server of the network (refer to 0060, 0064, 0198, 0226, 0298).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

Art Unit: 2151

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.

3. Referring to Claim 3, Fulton teaches the network ID blinds a profile of the network to a routing table (refer to 0070) of the virtual home gateway (it is inherent that routing table comprises the network information so that can route data accordingly, refer to 0025, 0070, and 0090).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.

4. Referring to Claim 4, Fulton teaches associating the remote user comprises sending a request to a service provider AAA server to authorize the remote user (authenticates, refer to 0038, Table 1, page 2, and paragraph 0101).

5. Referring to Claim 5, Fulton teaches wherein the service provider AAA server contains the address of the network's AAA server (refer to 0060 and 0064, 0097).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.

6. Referring to Claim 6, Fulton teaches wherein sending a request to authenticate the remote user comprises routing the request using a customer routing table of the network (refer to 0025, 0101, 0070, 0097).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

Art Unit: 2151

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.

7. Referring to Claim 7, Fulton teaches wherein connecting the remote user to the network comprises setting up a PPP session for the remote user (refer to 0178, 0192, 0196, 0274).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.

8. Referring to Claim 8, Fulton teaches comprises sending an accounting request to the network's AAA server (refer to 0097).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.

9. Referring to Claim 9, Fulton teaches comprises sending an accounting request to the service provider's AAA server (refer to 0033, 0060, 0082, 0097).

10. Referring to Claim 10, Fulton teaches wherein accounting information sent to the network's AAA server is different than the accounting information sent to the service provider's AAA server (refer to 0097).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.



Art Unit: 2151

11. Referring to Claim 12, Fulton teaches wherein associating a remote user with the network comprises identifying the network based on a dial-up phone number (PSTN, ISDN, 0101, and 0031).

12. Referring to Claim 13, Fulton teaches wherein associating a remote user with the network comprises identifying the network based on the circuit ID (refer to 0031-0033, 0041, 0066, 0198, and 0226).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.

Claims 11, 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fulton et al hereinafter Fulton (US 2002/0010865) in view of Applicant Admitted Prior Art (AAPA) in further view of Hagan, W, Alexander hereinafter Hagan (US 2002/0075844).

Art Unit: 2151

1. Referring to Claim 11, Fulton teaches wherein associating a remote user with the network comprises identifying the network based on a domain name (refer 0038, Table 1, and page 2).

Fulton Nor AAPA discloses about the domain name.

Hagan discloses the domain name associated with the network (refer to 0049)

It would have obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Hagan and Fulton because they both deal with accessing private network and their resources. Furthermore, the teaching of Hagen to allow wherein the information received from the remote user is a domain name would improve functionality of Fulton's system by maximizing communication compatibility of all participating user/clients and therefore increase efficiency of providing information over the network.

2. Referring to Claim 18, a system for providing authentication in a virtual private network having an AAA server, the system comprising:

a virtual home gateway (PVC, refer to 0038) configured to receive requests from a remote user for connection with a network (refer to 0102), send a request to authenticate the remote user to the AAA server of the virtual private network, and connect the remote user to the virtual private network (refer to 0101);

a database for storing addresses of network AAA server; and a processor (router, which comprises a processor, refer to 0104, )

Art Unit: 2151

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network. Fulton does not teach a processor operable to look up the address of the network based on information received from the remote user.

Hagen teaches a processor operable to look up the address of the network based on information received from the remote user (refer to 0061 and 0175).

At the time of the invention, it would have been obvious to a person of ordinary skill to the teaching of Hagan and Fulton because they both deal with accessing private network and their resources. Further, the teaching of Hagan to allow a processor operable to look up the address of the virtual private network AAA server based on information received from the remote user would improve functionality and efficiency of Fulton's system by integrating the communication protocol in order to execute instructions and transfer information to and from resources over the network.

3. Referring to Claim 19, Fulton wherein the information received from the remote user is a circuit ID (refer to 0031-0033, and 0041, 0066, and 0198, and 0226).

4. Referring to Claim 20, Fulton does not expressly teach the method of claim 18, wherein the information received from the remote user is a domain name (refer to 0049).

It would have obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Hagan and Fulton because they both deal with accessing private network and their resources. Furthermore, the teaching of Hagen to allow wherein the information received from the remote user is a domain name would improve functionality of Fulton's system by maximizing communication compatibility of all participating user/clients and therefore increase efficiency of providing information over the network.

5. Referring to Claim 21, wherein the information received from the remote user is a dial-up phone number (refer to 0031, 0198, 0237, and 0296).

6. Referring to Claim 22, wherein a service provider AAA server coupled to the virtual home gateway and configured to authorize the remote user (refer to 0038, 0101, table 1, page 2).

7. Referring to Claim 23, wherein the database includes network Ids used to bind network profiles to a routing table of the virtual home gateway (refer to 0025, 0070, 0277).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.

8. Referring to Claim 24, wherein the virtual home gateway comprises a plurality of routing tables corresponding to different network (refer to 0025, 0070).

Fulton does not expressly disclose the network is virtual private network.

AAPA indicate the usage of virtual private network along with AAA server (page 1-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combined the teaching of Fulton and AAPA, and utilize the virtual private network rather than network.

The suggestion/motivation for doing so would have been that by utilizing the virtual private network, it saves the actual purchasing of the hardware for the network.

### ***Conclusion***

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2151

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571)272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Karen Tang

10/18/05

  
**ZARNI MAUNG**  
SUPERVISORY PATENT EXAMINER